

RF signal is received by an external antenna and then goes to the circuit thru a mounted coax connector. The signal goes to a 315 MHz SAW filter a LNA preamplifier and finally applied to Infineon Receiver IC TDA5211. This receiver IC has a LNA Stage one mixer, one IF filter at 10.7 MHz a ASK detector, a low pass data filter of 5 KHz and a data slicer circuit. Received digital Data is further processed by the master micro-controller IC. The LO signal which is also applied to the mixer stage is generated by a Frequency synthesizer, which consist of a crystal controlled Reference oscillator running at 10.178 MHz. a VCO running at 651.4 MHz which is divided by 2 and applied to the mixer to get the 10.7 MHz IF frequency. The VCO (651.4 MHz) is also divided by 64 in this process.